

WHAT IS CLAIMED IS:

- 1 1. A method, comprising:
2 determining at a storage device that a current media status has changed; and
3 transmitting an asynchronous message to a host system as a result of the
4 determination, wherein the asynchronous message can also be transmitted for a reason
5 other than a current media status change.
- 1 2. The method of claim 1, wherein the asynchronous message is associated with a
2 serial advanced technology attachment interface.
- 1 3. The method of claim 2, wherein the asynchronous message is associated with a
2 set device bits packet.
- 1 4. The method of claim 1, wherein the determining is performed while the
2 storage device is in a lower-power state.
- 1 5. The method of claim 4, wherein the reduced power state is a sleep state.
- 1 6. The method of claim 1, further comprising:
2 receiving from the host system a command to adjust a power state associated with
3 the storage device.

1 7. The method of claim 1, further comprising:
2 receiving from the host system a query for a current media status; and
3 transmitting to the host system an indication of the current media status.

1 8. The method of claim 7, wherein the current media status indicates at least one
2 of: (i) an absence of a removable storage media, and (ii) a presence of a removable
3 storage media.

1 9. The method of claim 1, wherein the storage device comprises at least one of:
2 (i) a compact disc drive, (ii) a digital versatile disk drive, (iii) a tape drive, and (iv) a
3 removable hard disk drive.

1 10. An apparatus, comprising:
2 a detection unit to determine a change in a current media status at a storage
3 device; and
4 an interface unit to transmit an asynchronous message to a host system as a result
5 of the determination, wherein the asynchronous message can also be transmitted for a
6 reason other than a current media status change.

1 11. The apparatus of claim 10, wherein the interface unit is a serial advanced
2 technology attachment interface.

1 12. An apparatus, comprising:
2 a storage medium having stored thereon instructions that when executed by a
3 machine result in the following:

4 determining at a storage device that a current media status has changed,
5 and

6 transmitting an asynchronous message to a host system as a result of the
7 determination, wherein the asynchronous message can also be transmitted for a
8 reason other than a current media status change.

1 13. The apparatus of claim 12, wherein execution of the instructions further
2 results in:

3 receiving from the host system a query for a current media status, and
4 transmitting to the host system an indication of the current media status.

1 14. The apparatus of claim 13, wherein the current media status indicates at least
2 one of: (i) an absence of a removable storage media, and (ii) a presence of a removable
3 storage media.

1 15. A method, comprising:

2 receiving at a host system an asynchronous message from a storage device as a
3 result of a current media status change, wherein the asynchronous message can also be
4 received for a reason other than a current media status change; and

5 arranging for a power state associated with the storage device to be adjusted as a
6 result of the asynchronous message.

1 16. The method of claim 15, further comprising:

2 transmitting to the storage device a query for a current media status; and

3 receiving from the storage device an indication of the current media status.

1 17. The method of claim 15, wherein the arranging comprises:
2 transmitting to the storage device a command to adjust the power state.

1 18. The method of claim 15, wherein the asynchronous message is associated
2 with a serial advanced technology attachment interface.

1 19. The method of claim 18, wherein the asynchronous message is associated
2 with a set device bits packet.

1 20. The method of claim 19, further comprising:
2 generating an interrupt to a storage device driver in response to the asynchronous
3 message.

1 21. An apparatus, comprising:
2 a storage medium having stored thereon instructions that when executed by a
3 machine result in the following:
4 receiving at a host system an asynchronous message from a storage device
5 as a result of a current media status change, wherein the asynchronous message
6 can also be received for a reason other than a current media status change, and
7 arranging for a power state associated with the storage device to be
8 adjusted as a result of the asynchronous message.

1 22. The apparatus of claim 21, wherein execution of the instructions further
2 results in:
3 transmitting to the storage device a query for a current media status, and
4 receiving from the storage device an indication of the current media status.

1 23. The apparatus of claim 22, wherein the current media status indicates at least
2 one of: (i) an absence of a removable storage media, and (ii) a presence of a removable
3 storage media.

1 24. A system, comprising:
2 a host processor; and
3 a disk drive, wherein the disk drive is to transmit asynchronous message to the
4 host processor indicating that a current disk status has changed, wherein the
5 asynchronous message can also be transmitted for a reason other than a change in the
6 current disk status.

1 25. The system of claim 24, wherein a power state associated with the disk drive
2 is adjusted as a result of the asynchronous message.

1 26. A storage device driver method, comprising:
2 receiving at a storage device driver an asynchronous notification indicating that a
3 current media status associated with a storage device has changed;
4 determining a current media status in response to the received indication; and
5 arranging for the current media status to be provided to an operating system.

1 27. The method of claim 26, wherein said arranging comprises:
2 caching the current media status;
3 receiving a synchronous poll request from an operating system; and
4 responding to the synchronous poll request in accordance with the cached current
5 media status.

1 28. The method of claim 26, wherein said arranging comprises:
2 passing an asynchronous indication of the current media status to the operating
3 system.

1 29. A storage device driver apparatus, comprising:
2 a storage medium having stored thereon instructions that when executed by a
3 machine result in the following:
4 receiving at a storage device driver an asynchronous notification
5 indicating that a current media status associated with a storage device has
6 changed,
7 determining a current media status in response to the received indication,
8 and
9 arranging for the current media status to be provided to an operating
10 system.

1 30. The apparatus of claim 29, wherein said arranging comprises:
2 caching the current media status,
3 receiving a synchronous poll request from an operating system, and

4 responding to the synchronous poll request in accordance with the cached
5 current media status.

1 31. The apparatus of claim 29, wherein said arranging comprises:
2 passing an asynchronous indication of the current media status to the operating
3 system.

1 32. An operating system method, comprising:
2 receiving from a storage device driver an asynchronous indication of a current
3 media status associated with a storage device and removable media; and
4 performing an action in response to the asynchronous indication.

1 33. The method of claim 32, wherein the action comprises determining whether
2 information stored on the removable media should be provided to a user.

1 34. An operating system apparatus, comprising:
2 a storage medium having stored thereon instructions that when executed by a
3 machine result in the following:
4 receiving from a storage device driver an asynchronous indication of a
5 current media status associated with a storage device and removable media, and
6 performing an action in response to the asynchronous indication.

1 35. The apparatus of claim 34, wherein the action comprises determining whether
2 information stored on the removable media should be provided to a user.

1 36. A method, comprising:
2 determining at a storage device that an event has occurred; and
3 transmitting an asynchronous message to a host system as a result of the
4 determination, wherein the asynchronous message can also be transmitted for a reason
5 other than an occurrence of the event.

1 37. The method of claim 36, wherein the event is associated with at least one of:
2 (i) activation of a button, and (ii) an overheating condition.